



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,493	01/10/2007	Peter Carlo Rem	6900-24 (175821)	9489
30448	7590	11/23/2009	EXAMINER	
AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			HAGEMAN, MARK	
			ART UNIT	PAPER NUMBER
			3653	
			NOTIFICATION DATE	DELIVERY MODE
			11/23/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip@akerman.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/549,493	REM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mark Hageman	3653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15, 16, 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9-15-2005</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I (claims 1-14, 17 and 18) in the reply filed on 9-9-2009 is acknowledged. The traversal is on the ground(s) that both groups recite baffles which are the special technical feature regardless of differences in the specific aspects of the baffles claimed. This is not found persuasive because as evidenced by the rejection below baffles by themselves are not special technical features and their presence fails to distinguish the claim from the prior art. Thus only specific aspects (spacing, number etc.) of the baffles may potentially be special technical features.

The requirement is still deemed proper and is therefore made FINAL.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the jet stream and the baffle spacing must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

Art Unit: 3653

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 1 is objected to for failing to comply with 37 CFR 1.75(i) which sets forth that "[w]here a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation."

4. Claim 12 is objected to because of the following informalities: "viaa" in line 3 should be via. Appropriate correction is required. Furthermore in claim 12 it is unclear if "opening" should be openings. The specification implies and it makes sense that each collection chamber would need its own respective discharge to collect the particles fractions.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 3653

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-14, 17 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification contains no discussion regarding the limitations of claims 1, 17, and 18 related to baffle placement.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-14, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "wherein the baffles are placed maximally 3x the diameter of spread of the particles that spread out the most of the particle fraction spreading out the most." This renders the claims indefinite for the following reasons. First it is not clear what is meant for the baffles to be placed. This implies there arrangement or spacing but no angle or dimension is mentioned to actually understand how this placement is measured or quantified. Secondly it is unclear what dimension is implied by "diameter of spread of the particles that spread out the most of the particle fraction spreading out the most" and how this value is

Art Unit: 3653

determined. Further it is unclear how this value can be determined without know specific information about the particles being separated.

9. Additionally claim 1 is indefinite as it is not clear what the steps of the method actually are. The format and language of the claim make it impossible to determine what actual steps are being claimed.

10. Claim 3 recites the limitation "the means" in line 3. There is insufficient antecedent basis for this limitation in the claim.

11. The claims have been examined as best understood but due to the indefiniteness of the baffle placement limitation this limitation is not regarded as limiting the claim at this time. The claim has been treated such that the presence of baffles will anticipate the placement limitation.

### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-6, 10-12, 14, 17, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 1119191 to Eder. Eder discloses a method of separating a particle fraction from a particle stream, wherein the particles of the particle stream are separated in a fluid in a container (figure 1, 22) under the influence of gravitational force based on difference in vertical velocity, wherein the fluid and the particles are moved in

Art Unit: 3653

a substantially horizontal direction defining a relative direction of movement (rotation of shaft 14 and movement of baffles 21 and wall 19), and wherein at a first location a first particle fraction is collected (7), and at a second location somewhat removed from the first location, a second particle fraction is collected (7 see figure 2 for collection chambers and discharges) in respective collecting means, wherein baffles (21) are provided for causing the fluid to move in the relative direction of movement, wherein the baffles are placed maximally 3x the diameter of spread of the particles that spread out the most of the particle fraction spreading out the most.

Re claim 2 outer wall 22 defines an upright standing cylinder.

Re claim 3 see figure 1, shaft 14 supporting inner wall 19 and baffles 21 extending from 19 to 22.

Re claim 4-6 see water in tank and the fact that the particles introduced sink and are collected in chambers (7, 8).

Re claim 10 see sieve and perforated plate (27 and 28).

Re claims 11 and 12 size dependant introduction based on sieve presence and collection occurs based on settling time at various chambers (7, 8).

Art Unit: 3653

Re claim 14 the chambers (7) are sized differently according to settling time.

Furthermore is this were not the case some light material would be collected in the same chambers where the heaviest material was previously collected.

Re claims 17 and 18 see above.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of US 5,738,222 to Pagenkopf. Eder discloses all the limitations of the claim except the specific of the stream of particles. Pagenkopf discloses sorting a waste stream including plastic and metal (c1 lines 11+) in a liquid medium in order to separate the materials and recover materials of further value.

It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to have modified Eder to include the specific streams, as taught by Pagenkopf, in order to separate waste streams and recover valuable fractions therefrom.



Art Unit: 3653

16. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of US 2,854,136 to Gillie. Eder discloses all the limitations of the claim except the use of a jet stream to aid in the discharge. Gillie discloses a discharge utilizing a jet stream (22) in order to facilitate sorting and discharge (c4 lines 50+).

It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to have modified Eder to include the jet stream, as taught by Gillie, in order to facilitate sorting and discharge.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Hageman whose telephone number is (571) 272-3027. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick H. Mackey/  
Supervisory Patent Examiner, Art  
Unit 3653

MCH